[3]

Units

## MANUFACTURING TECHNOLOGIES, CERTIFICATE OF ACHIEVEMENT

### **Welding Technology**

Certificate of Achievement Welding Technology: Based on the American Welding Society Entry Level Welder Standards, the welding technology certificate of achievement program gives students the welding skills necessary to qualify for an entry-level position in a diversity of occupations that utilize welding from construction to manufacturing along with part of the general education skills that are strongly requested by commercial and industrial employers.

### **Certificate Outcomes**

Students completing the certificate will:

- Be proficient in two major welding processes and prepared for industry-standard certification.
- Identify and explain technical drawings and apply print reading techniques required in the welding industry.
- Consistently demonstrate safe and proper use of welding equipment, power tools, and accessories in the performance of welding and joinery.

#### Gainful Employment

While all of the educational programs at Truckee Meadows Community College are designed to lead to either employment or transfer, the Department of Education requires that we provide information on specific certificate programs. Specific information on the cost of this program is available here. (http://www.tmcc.edu/financial-aid/consumer-information/gainful-employment/subjects/welding) We hope this information is helpful to you as you make your career and educational choices.

Certificates of Achievement are a set of courses that can serve as a stepping stone to an associate degree or allow students to enter the workforce. Certificates of Achievement have a general education component.

To earn a Certificate of Achievement, students must:

- Maintain a minimum cumulative GPA of 2.0 (see requirements for graduation.)
- 2. Complete a minimum of 15 semester credit hours within the college.
- 3. Satisfy General Education requirements for the AAS (http://catalog.tmcc.edu/degrees-certificates/general-education/aas).
- 4. Have no financial or library obligation to the college.

Requirement is satisfied through embedded curriculum in the following courses: MPT 140, OSH 222, WELD 211, WELD 212 WELD 221, WELD 222.

Mathematics

Requirement is satisfied through embedded curriculum in the following courses: DFT 110, MPT 140 WELD 211 WELD 212

Print Reading for Industry

# WELD 221, WELD 222. Certificate Requirements

**DFT 110** 

1st semester

| MPT 140                             | Quality Control                   | 3  |  |
|-------------------------------------|-----------------------------------|----|--|
| OSH 222                             | General Industry Safety           | 1  |  |
| WELD 211                            | Welding I                         | 3  |  |
| WELD 212                            | Welding I Practice                | 2  |  |
| WELD 221                            | Welding II                        | 3  |  |
| WELD 222                            | Welding II Practice               | 2  |  |
| Elective Requirements               |                                   |    |  |
| Select 10 units from the following: |                                   | 10 |  |
| MTT 101                             | Introduction to Machine Shop      |    |  |
| MTT 150                             | Metallurgy I                      |    |  |
| WELD 101                            | Basic Metals                      |    |  |
| WELD 231                            | Welding III                       |    |  |
| WELD 232                            | Welding III Practice              |    |  |
| WELD 241                            | Welding IV                        |    |  |
| WELD 242                            | Welding IV Practice               |    |  |
| WELD 250                            | Welding Certification Preparation |    |  |
| Total Units                         |                                   | 30 |  |

|                       | •                          | • |
|-----------------------|----------------------------|---|
| Communicat            | tions <sup>1</sup>         | 3                                       |
| Elective <sup>1</sup> |                            | 6                                       |
| OSH 222               | General Industry Safety    | 1                                       |
| WELD 211              | Welding I                  | 3                                       |
| WELD 212              | Welding I Practice         | 2                                       |
|                       | Semester Total             | 15                                      |
| 2nd semeste           | er                         |   |
| Elective <sup>1</sup> |                            | 4                                       |
| DFT 110               | Print Reading for Industry | 3                                       |
| MPT 140               | Quality Control            | 3                                       |
| WELD 221              | Welding II                 | 3                                       |
| WELD 222              | Welding II Practice        | 2                                       |
|                       | Semester Total             | 15                                      |
|                       | Total Units                | 30                                      |

See program recommendations or requirements.

Code Title Units
General Education Requirements

Communications 3

Recommended:
ENG 107 Technical Communications I

Human Relations [3]